

## Great School Spaces

### Part 1

#### TAMMIE KNIGHTS:

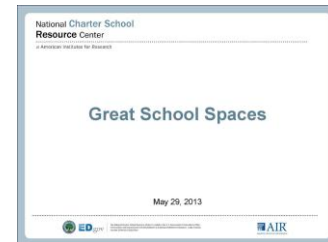
Good afternoon, everyone. I think we are going to start again because I think we were missing our audio.

My name is Tammie Knights from the National Charter School Resource Center. And I'm pleased to welcome you to our Facilities Institute Series, where today we'll be focusing on Great Spaces.

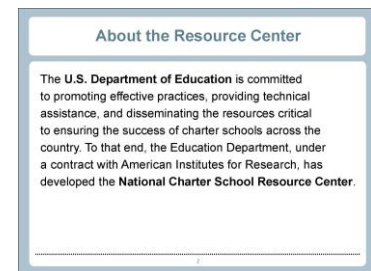
I want to quickly tell you about the Resource Center. We are funded by the Department of Education's Charter Schools Program and serve as a national center to provide resources, information, and technical assistance to support the successful planning, authorizing, implementation, and sustainability of high-quality charter schools; to share evaluations on the effects of charter schools; and to disseminate information about successful practices in charter schools.

I want to quickly remind you about our webinar platform. You can listen to the audio portion either through your computer or over the phone. If you do join by phone, please mute your computer speakers to prevent an echo effect. If you are not prompted to enter your phone number, please dial the number that is listed in the chat. For any questions you have on today's presentation, [please enter them] under the chat in the File Share; as well we'll be posting the webinar and [the] PowerPoint on the Charter School Resource Center webpage. As a reminder, the webinar is being recorded. So to ensure audio quality, we have muted all of the participants.

And with that, I'm going to turn it over to Joshua Kern from TenSquare who'll be our moderator of the panel, in addition to telling you more about our Facilities Institute Series.



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**JOSHUA KERN:**

Great; thank you, Tammie. My name is Joshua Kern. I'm the managing partner of [TenSquare](#). TenSquare is a national charter school support organization specializing in working with charter schools throughout the facilities process. And now to introduce the rest of my panel: All the way to my right is Lisa.

**Slide 3****LISA DESFOSSSES:**

Hi. I'm Lisa Desfosses, the senior director of facilities for [Achievement First](#).

**MILTON SHINBERG:**

I'm Milton Shinberg, partner [of] [Shinberg Levinas Architects](#) in Washington, D.C.

**JUAN MORENO:**

I'm Juan Moreno, president of the architecture firm [JGMA](#).

**AISHA ISACKSON:**

And I'm Aisha Isackson. I'm the president of [Isackson Design Group](#), an architectural and interior design firm in Baltimore, Maryland.

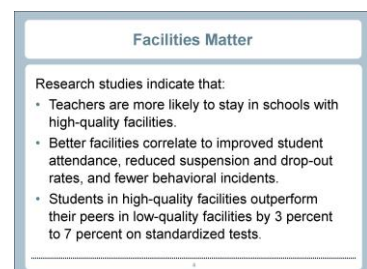
**JENNY WIEDOWER:**

I am Jenny Wiedower with the Center for Green Schools at the [U.S. Green Building Council](#).

**JOSHUA KERN:**

Research is clear that school facilities impact student and school performance. As you all know, charter schools operate in high-stakes environments. Research tells us that the quality of your facility will be a factor in how your school performs. Some specific findings from the research are [as follows:]

- Teachers are more likely to stay in schools with high-quality facilities.
- Better facilities correlate to improved student attendance, reduced suspension and dropout rates, and fewer behavioral problems.

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- All things being equal, students in high-quality facilities outperform their peers in low-quality facilities by 3 [percent] to 7 percent on standardized tests.

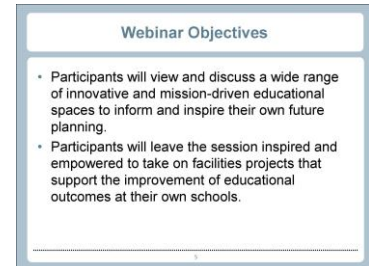
This is the first of four webinars [in the Facilities Institute Series]. In subsequent webinars, which will be each Wednesday for the next three Wednesdays, we will discuss the specifics of how to plan, finance, and manage your facility's project.

We have two primary goals for today's webinar. First, that you will view and discuss [a wide range of innovative and mission-driven spaces] [and] to visit other school buildings to get ideas and learn about what is possible. This webinar aims to be a quick and efficient way to perform this initial step.

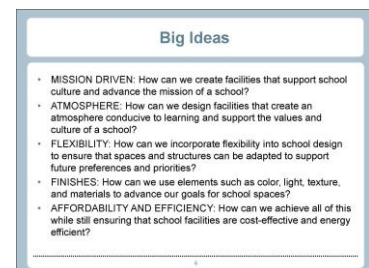
The second goal is for you to leave the session inspired and empowered to take on facility projects that support the improvement of educational outcomes for your schools.

When we work with schools, we find that there are some overarching considerations that drive much of the decision-making process. These considerations include [the following:]

- How can we create facilities that support school culture and advance the mission of a school?
- How can we incorporate flexibility into the school design to ensure that spaces and structures can be adapted to support future preferences and priorities?
- How can we use elements such as color, light, texture, and materials to advance our goals for school spaces?
- Finally, how can we achieve all of this while still ensuring that the facilities are cost-effective and energy efficient?



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Today, you will see and hear about how schools have effectively addressed these considerations in their facilities' projects. We're going to see a range of "great spaces": large, small, newly constructed, renovated, touched up, urban, and rural. The common thread of all these spaces is that each space is designed to directly support and advance the new [mission and values of the school. We want to] ask some questions of our audience, just so that we can get a better sense of who you are and then we can tailor our presentation accordingly—if we can just pose some questions. [pause]



### **TAMMIE KNIGHTS:**

It looks like we have 25 percent [who] are school staff members, about 28 percent are charter school management staff, 16 percent are authorizer staff, and about 31 percent are board members. Thank you for participating.

Our next question is how you would characterize yourself. [pause]

Our experience at looking to learn about the work—and about 8 percent are pro but could always learn more; look forward to knowing the pros especially. [pause]

And our next question is around your school facility. [pause]

Thank you; this is helpful. We've got about 21 percent in a stand-alone private space. [Inaudible] before we get started, which is if you could tell us a little bit more about your school. [pause]

Great. [pause] Of the 157 folks who have logged in, we have about 16 percent who are a new school in the planning phase, about 6 percent who are a new school in an incubation phase, about 62 percent who are not new but are looking for new and/or improved space, and about 14 percent who are in the middle of a construction project or a building acquisition project. Thank you so much for

participating in those; that will help us tailor our presentation today as we talk through some great spaces.

**JOSHUA KERN:**

So now Aisha Isackson is going to talk a little bit about lobbies and entrances.

**AISHA ISACKSON:**

Okay. Well thank you for having me here. Every school has a vision and mission that is evident in the practices of that school: in its culture and in its [inaudible], walls, and ceiling.

What is the message that greets you? You can tell by looking around the physical environment what is important to that school.

- What does it value?
- How it sees its community, students, teachers, and parents.
- How you will be treated.
- How you are expected to contribute.

Every color, texture, finishes, furniture, and furnishings from lobby to hallway, bathroom, and café—they all reflect who they are as a school.

So what you see in this slide is the entrance lobby of City Neighbors High School in Baltimore City. It is in a renovated public school building that it shares with its sister elementary [inaudible] school called City Neighbors Hamilton. So let's begin with knowing who City Neighbors are from their vision and mission statements.

Just quickly, they are project-based learning, and it is a home away from home. City Neighbors began with a question, “How do you create a learning environment where students are known, loved, and supported academically?” Learning is a social event, and the educational spaces contribute to the relationships in the school.



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So what we did was we began by removing existing walls and the acoustic ceiling tile to create this large lobby. Even though you don't see the full height glass door front, it is making this lobby visible from the school office and as you approach the building. By using warm and inviting colors, we created the walls that you see on the right, made from recycled fire-rated sound boards. And they are covered with student pictures that go to this school, highlighted by simple gallery lighting and pendant light fixtures. We then added some wood-beaded panels as a feature wall and to wrap the existing columns to add texture, warmth, and simple elegance to this lobby. It's a great gathering place for day-to-day operation and for special events. And I'm proud to say that it is one of the highest attended, newer high schools in Baltimore City right now.

This slide is the separate entrance lobby of the sister elementary school called field display, a welcoming entrance with warm and inviting colors with pendant fixtures and home-like furniture and furnishings. You can see the transparency between the school office on your right to the entrance on your left. And it creates another layer of security, where visitors can be buzzed in without even looking at a security monitor. And also because, even though you can't see it, there is a nook in this lobby where parents can log in their volunteer hours and check out what help is needed around the school. There are other close-by areas that are being used for community engagements, such as [a] parent room, [the] indoor courtyard, and [the] outdoor amphitheater.

### **LISA DESFOSSSES:**

The next slide that you see is one of the [inaudible] a district-owned building. It's three stories tall, and Achievement First first moved into it and occupied this floor that you see here. It's actually the second floor to the building, but there is a ground-level second floor entrance. There is a separate public school that occupies the first floor, and we ultimately had another school occupy the third floor as well.



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One of the first things that we did when we did this renovation is we...our renovations are extremely frugal and economical. But we saved just a little bit of money to create one or two moments inside of a school, usually in the lobby or the entrance area, that really create a very strong sense of...the other piece that's sort of interesting.

Right across the street there is a school called the Martin Luther King School that was in the process of being closed, or at least discussed about whether it was going to be closed, at the same time as we were opening this school. And so one of the things that we did was we specifically chose to put a quote from Martin Luther King on this first entrance of the building so that there's an opportunity for the parents and students from the other school to feel welcomed and appreciated in our building. So that was one of the key things that we did in order to reach out to the community in this location.

### **MILTON SHINBERG:**

Great. Hallways are an especially important part of any school building. Hallways play a large part in setting the tone and creating the culture for your school. Students and visitors often get a quick feel for a school by what is going on and what is being communicated in the hallways by an underperforming school. In these cases, it is critical that schools take every opportunity to convey to students that this is a new and different environment with increased expectations as well as additional encouragement and support.

We want to show you this slide as an example of how—with very little money—you can create an environment that effectively communicates important messages about your school to your students. Explore does a good job of using student work, paint colors, photos, and banners to define their space. It's worth noting that these hallways in Explore are markedly different than the hallways in the adjoining school, which is just through the double doors located in the back of the picture.



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In this particular picture, we see characteristics of how to use hallways that are illustrative of what we see in many high-performing schools. Banners that hang from ceilings can help inspire and focus students [and the] accomplishments that students and the school have achieved.

We also see heavy use of, of the walls to display student work and information about current programs being offered. Additionally in the background is a board that is dedicated to sharing selective information about teachers and other staff members. Sharing information such as where a teacher was born or where they went to college can be a helpful and easy way to build a sense of community in schools.

We wanted to show the last picture because it's an example of what is possible with little cost in an unrenovated building. This slide is a good example of how to use colors and photographs to create a warm and inviting environment. We see in the hallways of many high-performing charter schools inspirational quotes on signs or painted directly into the wall, as you see here.



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We also often keep pictures of students in their normal course of learning. Pictures of students studying.

### **MALE SPEAKER:**

The long, dark, monotonous hallways you can see in the bottom corners of the screen has a very, very negative impact on everybody. They communicate that it's just a space for transferring students [from] one classroom to another, with no regard at all for spirit or for making use of the space for program content.



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In the images of renovations, we emphasize intensification of the architectural elements to create special [moments]: some for special learning opportunities or sharing accomplishments outside the classroom.



More specifically, we make special moments by changing the materials of the ceilings and developing very carefully organized floor color schemes that have a color for each school component—elementary, middle, and high school in this 170,000-square-foot school. It was really disorienting initially. We’ve reinforced the zones for each of them by creating architectural portals to help students know when they’re entering their special part of the building, so I think it’s a powerful way to make special spaces.

Differentiating lighting to emphasize special spaces is an economical way to improve the quality of the spaces. That could support making the special places for activities to reinforce values as well as program, reinforce the respect students get in the learning process, and celebrate the achievements of the great students that are nurtured in their educational environment. How we do that architecturally is significant.

This is one project that illustrates some of the approaches that work for this particular charter school, Capital City in Washington, D.C., which was the renovation of a D.C. public school that was surplus for \$130 a square foot.

### **AISHA ISACKSON:**

Okay. This is a before-and-after picture of a major hallway at City Neighbors Hamilton, which is a K–8 school. If you can focus on the blue double doors at the left inset picture to orientate yourself, you can see these are simple design solutions that you can do to an existing building. By adding wall colors and accent details on the walls and floor, you can easily create [inaudible] warmth and elegance. The double metal doors—they are metal—but they were painted to match the wood doors and accent panels to create a cohesive design flow. All the interior doors in this school have glass to add natural lighting to the hallway. And, again, the transparency from the school office to your left creates easy supervision when students go to the nearby bathroom on your right, or to the lobby on the left, or to the gallery wall that displays student work that takes them to



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the outdoor courtyard through the double doors that you see beyond.

So this slide [inaudible] by introducing a central gallery; I don't know if you can see beyond that arch. So we introduced more drywall arches, and we used wood vinyl planks on the floor to soften it. And they are full height gallery spaces, surfaces with drum pendant light fixtures to create a contemporary home-like interior.

In the remaining hallways, we use carpet tiles and full height tackable gallery walls sound panels to help deafen the sound, soften the hard surfaces, and display students' work. And what you see here is one of the many notes at City Neighbors High School with wood bench seating and transparency outside each classroom. It provides passive supervision between formal and in hallway paths and adds natural lighting to the interior hallway.

### **LISA DESFOSES:**

Great. So we're going to move on to the next section, which has to do with classrooms. And I know classrooms are at the heart of it all for all of us. That is the place where the bulk of learning happens, it's the place where our scholars and students spend the bulk of our day, and it really is the core of what we're trying to achieve as we try to improve the quality of instruction in student learning.

We spent a lot of time at Achievement First thinking about how our classrooms are organized and structured and [inaudible], flexibility, simplicity, and utility.

And so the first one—I mean flexibility. Our teachers often switch classrooms from year to year. And also their needs switch, even during the course of the year. They might have new idea for instructional modeling, and so they might switch out the structure of their classroom even midyear. For that reason, we really focus on modular furniture and making sure that there are multiple whiteboards, multiple teaching surfaces—that sort of thing—so the teachers can



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switch it up if they need to in order to improve instruction as the year goes on.

The second thing we look for is simplicity. This is not an area where we spend a ton of money, but we just try to be very smart about what we do spend and how we spend it. So you can see our floor tile [inaudible] could be used. As you can see in this image, we have whiteboards; we have tack boards; we even have windows posted with stuff on them. And really it's an exercise in utility so that the teachers can use every single square inch of the space for teaching.

This particular building is located in Brooklyn, New York, and it's called Achievement First Endeavor Academy. This is our elementary school. This building is a K–8, so it's shared by Achievement First Endeavor elementary and middle schools. It is an interesting building; it was a former ice cream factory that was six stories tall that was renovated, and it opened in 2010 for instruction. The six stories were renovated into classrooms, and then there was [a] small addition that was added for a gymnasium. And then there was a turf playfield on top of the gym that was built.

Especially on this first-floor classroom, you can see we've really tried hard to get something wow—a pretty vibrant color—to focus student attention on the critiquing wall. And simultaneously we make sure that the furniture, like the rugs in the classroom, really support teaching. As you can see and you'll see in subsequent photos as well, we order carpets where there's adequate space for one student to sit in each square of the carpet. So even that level of attention to the level of furniture and fixtures within the room really are designed to support every aspect of education that we can possibly support.

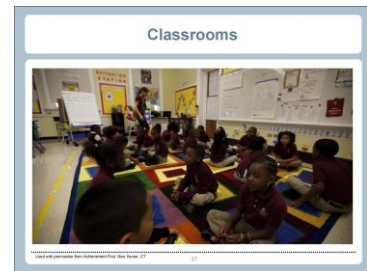
This entire building has exposed structures, exposed mechanical units—some of it pieces, some of it frankly not. But our philosophy on that is that it doesn't get in the way of instruction. And we would rather spend money on the core

instructional aspects of education.

In the next slide, this is another one of our programs; this is Achievement First Bridgeport Academy. We bought this property in 2010. It's located in Bridgeport, Connecticut. And it keeps a [inaudible] outside of the building.

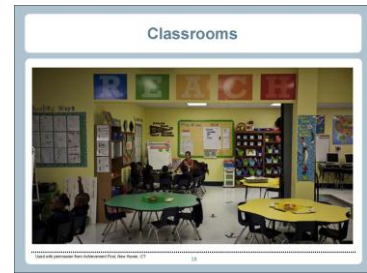
It is the most quintessential New England schoolhouse you've ever imagined. It had wood floors in all the classrooms, some of which were rotted through. It had tin ceilings. It had a ton of lead paint throughout this building. When we first walked through it as we were purchasing it, it had just been vandalized, and there were hot dogs and ketchup and mustard and fire extinguisher foam throughout the entire building. Someone had had a food fight in there. But to be honest, it really did not take much to bring it up to the level that you can see. [inaudible] Worked with whiteboards, and we did some rat abatement as needed. And then we painted both the walls and the ceilings. Other than that, all of our money was spent in this building on the fire alarm system, the sprinkler system, life safety systems, new windows, and some of the interior structure. But it was a pretty bare bones renovation to bring it to the level that it is today.

The one thing that I would say about this photograph in general and the lesson that we learned: We did not replace the tack boards in this building, even though they looked horrible, because we knew that the teachers would cover over the tack board anyway and so it didn't matter how they looked. And I wish that we had done the same thing with the chalkboards. It wound up being a good lesson learned. That we took the woodworking off and ordered custom chalkboards, custom whiteboards to fit. And so that was a lesson that we learned here.



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And, finally, this is a classroom at our Elm City Elementary School, which is in New Haven, Connecticut. This classroom just opened this past school year in 2012. It is a kindergarten room. And we look for between 900 and 1,000 square feet for our kindergarten rooms because there's so much individualized learning and group learning in our kindergarten classrooms.



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This is a good example of two things. The first is we had to combine two rooms together in order to create adequate square footage. And you can see, you can always see where the wall was, [inaudible] the situation. And using the two different ceiling heights for our REACH, which is one of our school core values, for that opportunity to express the core values in the classroom and really to create a separation of space. You can see on the far right, there's a space for computers. Straight ahead, there's one group working. And then on the left-hand side, there's a separate group working. And on the right-hand side, there's a rug. So we really do try to create differentiated learning spaces within our classrooms.

### **AISHA ISACKSON:**

This is a picture of a unique classroom at City Neighbors High School that we call pods, similar to homeroom. It's a home away from home, especially for the freshmen and sophomores who come together in a new [inaudible]. There are 16 students in each pod that stay together from freshman to senior. They support each other for independent and collaborative work to create a strong sense of community and ownership.



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This is the part where we have the student lockers. That's why you're not going to see the lockers in the hallway. We also introduce a living-room-style gathering space that you see on the left. On the top right is individual work station[s] with lockable cabinets for independent work. And at the bottom right is a small kitchenette in each pod that we use recycled cabinetry from an old home ec[onomics] classroom from the previous school that was using this

building. Again, it is used for casual dining if the students decide not to eat in the café and to do collaborative work with other pod members.

And just like Lisa, we use bold color on the feature wall where instruction happens and around the window casing. We balance the cheerful interior colors of the walls in flow with natural wood furniture and furnishing to support this project in play-based learning by combining new and used furniture. Yes, we use used furniture from hotel liquidators to help reduce costs, and it also adds a unique eclectic touch to the décor. We introduce various styles of furniture to help create many small learning environments within the classroom and by simply adding fabric curtains.

### **JUAN MORENO:**

This slide is of the Instituto Health Sciences Career Academy in Chicago, and it's a terrific example of the transformation of an old warehouse that really sat empty for many years. It was a heavy timber warehouse that, interestingly, the City of Chicago would not allow the conversion of that type of structure to a school use. And our fears going into it was really something that would feel very institutional with all the chipboard that we would have to wrap the ceilings, floors, [and] structure in. And our approach to this was really tried to take advantage...I think it's successful in trying to bring these spaces to life. And, most importantly, when students go into an existing building—one that maybe they've recognized in their community for many years as being dilapidated—that from the day they first walk into these spaces, that they do recognize that they are in a state-of-the-art learning environment. And, actually, some of that is quite new.



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**Slide 21**



**JENNY WIEDOWER:**

Outdoor classrooms present in [inaudible] English, math[ematics], physical education; all of these concepts can be enhanced out of doors.

Outdoor classrooms present a place to develop key learning skills, such as observation, social and technical skills, and hands-on learning. The best part is that you don't need to have pristine or manicured lawns for a great outdoor classroom. In fact, sites that aren't aesthetically pleasing often are the best locations for experiments and improvement projects. Schools can engage volunteers, organizations, and businesses to work together with students on improve[ments].



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**JUAN MORENO:**

In this section, we're going to discuss cafeterias. And although by definition [a] cafeteria is a place where people come together to eat, it's that piece of coming together that is the most intriguing in these types of spaces, especially in charter schools. Because by nature of their programmatic requirements, the size, these spaces actually can be used in a series of multiple uses that are conducive to many different types of functions for charter schools.



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In the example of the Instituto Health Sciences that is shown on the screen, it is the place where, yes, you eat. But it's also that chance for classes to come together. So whether it's a junior class, the other classes come in. Intriguingly, it's a unifying space for where public and private come together.

In this case in Instituto, as we looked where to put the cafeteria, what we recognized is that ultimately it's a celebration space. And one that when you have a school in an urban area, and you want the students there to recognize that they are part of the fabric of this—which you see in the distance—it is a great learning tool to show the student[s] that they are a vibrant part of the community. What's also a terrific part of this programmatic space is that

when you look at the community where you're putting these schools, if you look at the needs there. In this particular case, there is a high need for things such as [inaudible] spaces. And so this becomes a revenue generator.

**AISHA ISACKSON:**

Okay. In this picture, you are looking at a before-and-after picture of City Neighbors Hamilton café. If you look at the inset picture on the bottom left, if you can focus on the double doors, you can see how we work with what we have.

So City Neighbors believe in casual eating. And driven by staff input, we came up with a very eclectic Chevy chic, if you want to call it, restaurant style interior. What we did was we removed the dropped acoustic ceiling tile to create a higher ceiling. And we introduced recycle-like fixtures from architectural salvage stores in Baltimore and balanced them with simple pendant lighting. We also used recycled windows, I don't know if you can see that in the far beyond, that were aged to bring the outdoors in. And each window light offers an opportunity to display student pictures or artwork that can be easily changed year after year. We chose interior colors, wood plank that has hosted many plays and prom and families and events.

So again, this is, this is a slide of the City Neighbors Hamilton café as well just to show different style of seating option. At the bottom right is an outdoor seating for the café. It was originally a cold concrete pad for mechanical equipment, which served [as] a passage between the high school and the lower school building. And we simply added a wooden deck over the existing concrete and ran it diagonally to give it a custom, homey touch with potted plants, exterior lighting, affordable wood benches, and wood fence to conceal the mechanical equipment.



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So these students—we actually met with the students before we opened the school in 2010. And, of course, it has resulted as a lounge with various style of seating options. They have L-shaped couches, used L-shaped couches, with ottoman bench-style seating, pop style, and restaurant style seating. I don't know if you can see the picture on the left of the big picture. It used to have solid metal and wood doors that we replaced with new glass to bring natural light into the café. And it opened up to a covered arch patio that you see on the bottom left. So it was funny every time they come in here, and they see a picture of themselves on the walls. What you don't see is this café has a wooden stage with a piano that has hosted many special events for family things and small lecture series.

### **LISA DESFOSSES:**

This is the cafeteria at the former ice cream factory in Achievement First Endeavor Academy in Brooklyn. This cafeteria is a basement cafeteria, so it's in the cellar level. And one of the things that we chose to do was to spend money on two things here.

The first is obviously the paint pattern and to make it a vibrant, interesting space. And the second is the lighting; this is the area where we chose to go with specialty lighting to make sure that it didn't feel like a cellar space but instead felt like a vibrant, interesting space to be in.

When this picture was taken, there was a skylight back there behind that last structural element. And that let in some amount of natural light. We would never do that again. It has since been closed up; it leaked quite a bit. And, in addition, one of the pieces of glass did break. It was tempered glass. It didn't fall, and no one got hurt. But I think in retrospect, we probably would have saved the money and worked on, you know, better lighting solutions to get the appearance of natural light down there without actually having natural light down there.



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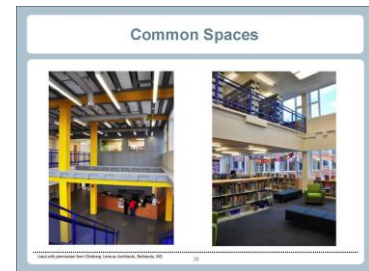
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## MILTON SHINBERG:

We can look at the connection. Sometimes these are multipurpose spaces. A cafetorium supports a range of functions. It's also a powerful strategy for saving money. Less square footage translates into major savings, but that's only workable if program and scheduling allow that option for your school. Multipurpose space is an option for most schools, but particularly for start-ups whose resources can be particularly limited.

For some schools, effective common spaces are reinforced by making vertical connections between floors, such as the entrance at the left with the library at the right. Demolition of some poor structure is actually pretty inexpensive, and it makes a statement that engages students and teachers. It reinforces the schoolwide identity. That's what's happening on the left; they're places of engagement. We have coffee areas for parents and staff where they mix and interact. Parents have special support areas just off the lobby, making them part of the community, including computers for those that don't have them at home. The school becomes a resource for families through the design of these spaces.

The tall space isn't enough to create a [inaudible]. The color scheme at the left is a teaching tool, differentiating calms in yellow—I'm sorry; that's the previous slide. Themes in yellow, floor structure in gray for example. We take each opportunity to make what's in the space sing the song of each school and use every element in the chorus. The space needed to accomplish the goals each school has for common spaces is not wasted space. It's core space for core functions. One way to reduce the cost in square footage terms is to locate them as nodes that are adjacent to hallways, which makes the hallway square footage a part of a node, not separate from it. The same purpose space can be used for that. This is DC Prep. It's a \$115 per square foot renovation, and, as you, I would love to be able to show you a slide of what it looked before.

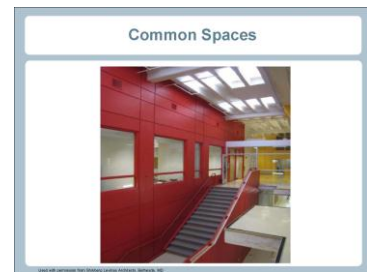


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## Part 2

### MILTON SHINBERG:

This is DC Prep, which is a converted warehouse. And in this space, the wall that you can see in red was created to define the end of the largest common space in this school. The school is a K–8. And they were concerned that in this large warehouse building, the students would not be able to relate to each other, would not see each other, and would not circulate—would not see each other as they circulate from the first floor to the second and vice versa.



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Most of the common spaces are aligned near this main. Each is capped by a skylight, which makes the center of this deep warehouse building into something live, something bright, [and] something attractive for the students.

The problem with warehouse buildings converted into schools is that they are so large that there's a lot of perimeter space. But there's also a lot of space in the center that can't be used or feels dismal. And I wish you saw this project, too, at the first time we visited it. It was a terribly derelict space.

### JUAN MORENO:

This image is one of common tailing of the column to the beam that's been wrapped forever in what I call mummified chipboard. And although unfortunate, it is a space, as Milton was just describing, is at the center of a deep floor plate, which means you don't get a lot of daylight into those spaces and you have to activate them. The principal at this school encourages activity in common spaces. Sometimes you see scenarios where schools try to discourage activity in common spaces. This is the opposite; this is one where the principal use of light these spaces can be done affordably and have great success for the students.



Slide 30



**AISHA ISACKSON:**

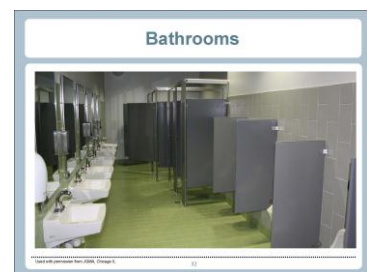
So why are we discussing that? I think that one is an important discussion that nobody wants to talk about sometimes. They are known to be hot spots for bullying and vandalism due to lack of supervision.

City Neighbors spent a lot of time discussing the bathrooms—how to achieve a clean place that looks like home to them. In many schools, [the] bathroom looks like, you know, they do because to save plumbing costs and to be vandal free. Sometimes schools take doors off the stalls to improve security, but it is inhumane, and it subjects students to a lack of privacy, humiliation, and insecurity.

[The] bathroom is a social place; there's no reason for it to be boring. So what you see here is simple yet elegant solution[s] that are less institutional, just by simply adding several oval mirrors. Realistically is less expensive to replacing oval mirrors than a large one. And just by simply adding residential-looking fluorescent sconces gives it a homey touch [inaudible] in this bathroom because this is where social habits...

**JUAN MORENO:**

I think the point I wanted to share on this bathroom image is that the same care that goes with the rest of the facility has to go into the bathroom. It can't be a space that's an afterthought and the use of the materials. If the common thread of the design has to do with color, let that color work its way into the bathroom. Yes, you have to think about durability, materials so that your maintenance costs are reduced. But let the bathroom be a place that is alive as much as the rest of the facility.

**Slide 31****Slide 32**



## JENNY WIEDOWER:

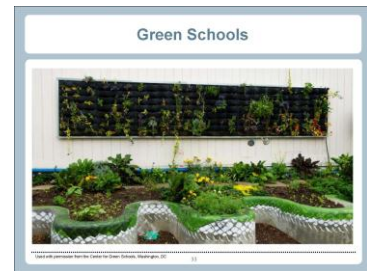
[words missing from audio]...Still learning while giving energy, resources, and money. These schools are built and operated to be full of clean air and sunlight and to be free of toxic materials and harmful chemicals.

Green schools are energy efficient, helping to lower utility costs, conserve resources, and reduce waste. Green schools are more than buildings; they showcase the community's commitment to its children and their future, who in turn learn from an early age the importance and benefits of acting as responsible stewards of their communities and the larger world.

Existing schools are primed to be green. Leaders can develop a plan to upgrade building systems, technologies, and policies over time so to think first on high-impact strategies that yield resource to help school champions identify these high-impact opportunities and then get those improvements financed and implemented, all while engaging the school community and aligning with the school's values and priorities. You can download a free copy of the [Green School\[s\] Investment Guide](#) at our website, which will be provided at the end of this webinar.

I have the supreme pleasure of learning about and working with some of the best examples of green public charter schools in the U.S. I want to highlight a few examples for you.

It's worth noting that the images I'm showing here don't actually focus on [inaudible] right sized and optimized for performance. Lighting and other electrical systems are high efficiency. Water conservation methods, such as faucet aerators and low-flow toilets, blend right in. Classrooms have abundant daylight, and teachers and students are more present and alert because they're not breathing stale air or straining to talk over ill-configured ventilation systems.



Slide 33



Slide 34

Can you actually go back to the last slide—the one-on-one side? The photo you see here is of the school garden at Environmental Charter High School in Lawndale, California. ECHS places an emphasis on [inaudible] school building and began transforming a small urban campus into a green oasis in South Los Angeles' concrete desert. The result is one of the most environmentally progressive campuses in the country, led in large part by the students, and complete with a LEED [Leadership in Energy and Environmental Design] Silver Certification and a U.S. Department of Education Green Ribbon Schools designation in 2012.

Here in the photo you see their living wall, which enables students to grow food in a limited space, and raised bed gardens, which provide healthy package-free sustainable snacks for students and staff. And a student-maintained [inaudible].

Here you see the incorporation of art into the ECHS facility itself. There has been a mural painted on the exterior wall in the background, the amphitheater in the foreground for performance arts made entirely of recycled concrete, and a signage of the green school strategy that we see in abundance across the country, whether encouraging occupants to turn off the lights when they leave a room or asking parents and school bus drivers to not idle their vehicles on school property. Or, in this case, explaining the elements helps schools like ECHS reach milestones such as 24.5 percent reduction in energy use from 2009 to 2012; 85 percent waste diverted from the landfill; 90 percent of cleaning products certified green and nontoxic; and also 90 percent four-year college acceptance rate; environmental sustainability themes integrated into 100 percent of subjects; and, in addition, student-led tours of the campus, and other leadership opportunities engaging thousands of community members annually.



**Slide 35**

Another charter school I'd like to highlight is the LEED Platinum Learning Gate Community School in Lutz, Florida. The spirit of Learning Gate has always been [inaudible] and resource efficiency, including utility cost savings. By utilizing natural daylight in different ways, the school has noticed an increase in student performance and productivity. Teachers are more engaged and focused on learning and logging fewer sick days. The technology used to monitor the building energy use, humidity levels, and water consumption have turned students into champions of conservation and wellness.

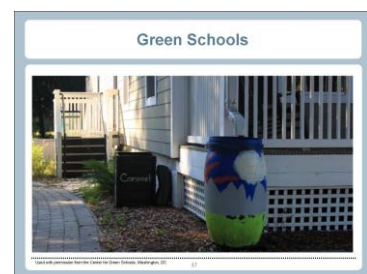
As you see here, the school is equipped with recycling and compost bins and rain barrels. [inaudible] featured on the Center for Green Schools website, a project profile of the building, design, and construction strategies that Learning Gate used in this LEED Platinum Project if you want a more technical look. Also on our website are sample lesson plans and community engagement guides for incorporating green school strategies into your school, using the Learning Gate Community School as a case study.

### **JUAN MORENO:**

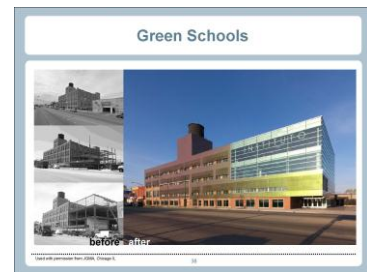
The image you see is of the exterior of the Instituto Health Sciences Career Academy High School in Chicago. And I think it's one of the buildings; it's real estate that has value, yet sometimes it's forgotten. This was just a warehouse, but one that when you look closely at—really the guts of this building—it really had some beautiful spaces. The floor-to-floor ceiling heights were taller, which allowed more daylight to come into the building. It was a sturdy building, but yet it wasn't a school. And the notion of real, like they're going into a new space. But as you look at the building, you'll see that the remnants of the old are still there. You see where the building has a new cladding because it is a health sciences learning academy, and it was an opportunity to teach through architecture what mold can do to a building, and how it is not a good thing, and how they can learn how a building like a human skin lives and breathes. All of these things went into the teaching and the ultimate execution of this project.



**Slide 36**



**Slide 37**



**Slide 38**

The next section is on outdoor [inaudible], and it's also an equally wonderful opportunity to link community with the school. All of those examples are seen in this slide.

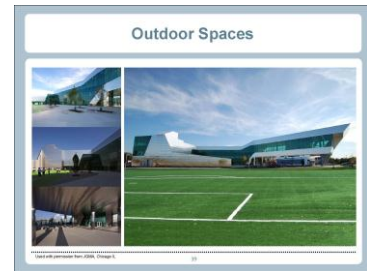
This slide is of the Uno Soccer Academy in an area of Chicago called Gage Park. The image that you see in the upper left-hand corner is of the soccer courtyard. This is an area where students K–5, let's say, are protected in a courtyard and can play soccer at the same time so they can be watched. Left, it's where you start to come out of that courtyard and into the exterior of the space. And if you look closely—I know it's difficult to see it on the slide—but if you look closely, you'll see benches. And what those benches are is an extension to the community. It's a welcoming to the community. Again, looking closer at that community, you see what some of the needs were, well you found that the older generation loves to play domino[es].

This charter school says, you know what? We want to welcome them to our campus. One that says we're not going to put barriers for the community to come to our facility. We're going to welcome them with open arms, and in fact they do; the community goes there. They play dominoes; it's a great way to activate the building.

### **LISA DESFOSSSES:**

This is the photograph of the rooftop, a playfield that is on Achievement First Endeavor Academy. This is the middle school playfield; the elementary school playfield is on top of the gym on the third floor. But it does overlook the rest of the city...and if you really need space. We weren't sure, to be honest, opening up this space how much used it would be. It is used any time the weather is even remotely good for the students to be out there for phys[ical] ed[ucation] class or for anything where they can have outdoor instruction space.

The other advantage to this space that we've learned is its [inaudible]. The one piece that I think we all wished that we'd thought of sooner was that there isn't a great outdoor



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storage location for phys[ical] ed[ucation] equipment up here. And so we've had to makeshift it over time. And that's something that we probably would have done originally in the original plans if they...had we thought of it then.

**MILTON SHINBERG:**

This shows the before and after condition. Obviously before is on the left, now is on the right of the school in Washington, D.C.—conversion of a former D.C. public school building.

Entrances to schools are outdoor spaces that can increase the activated space of the school. It's not free square footage, but it is nearly free square footage. They can serve as important common spaces, not just transitions between the sidewalk and the front door. If properly defined and [inaudible] used for educational programming.

Having a diversity of outdoor spaces adds richness that helps a good school facility become a great one. This displays how to transform a traditional and uninspiring school façade into a dramatic and fresh, open experience that reinforces the relationships and values that the school aims to promote. It contributes to making the start of every school day positive and energizing and full of promise. It's a respectful welcome and a great connection to the community. We've used [inaudible] of a self-fulfilling prophecy. Respecting the neighborhood, inviting respectful behavior engages the community and makes the school part of their turf and their world. You protect what's yours.

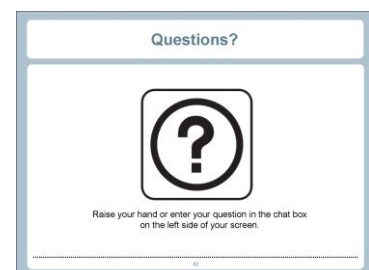
**JOSHUA KERN:**

Great. Thank you, Milton. This concludes this part of the webinar. We're now going to move into question and answer. But before we do, I want to take this opportunity to thank all of our expert panelists—Lisa, Milton, Juan, Aisha, and Jenny—for sharing their work and their perspective on what makes a charter school facility great.

I just want to remind you also that this is the first of a four-part webinar series. Next week we're going to be talking



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about the specifics of planning for your charter school. The following Wednesday, we're going to be talking about financing your charter school. And then the...

So now we're going to go to the question and answer. We've got some questions already, [but] please feel free to continue to send us questions throughout the Q&A, and we're going to get as many questions answered as we possibly can. If there are any questions we can't get answered, we'll make sure to e-mail you directly and send you those answers later.

So with that, I want to start—perhaps maybe I'll direct this to Lisa. But we can open it up to the entire panel after that. If you could just talk a little bit about blended learning and how to infuse technology into your classrooms.

**LISA DESFOSSSES:**

Sure. We are experimenting with this. So by no means do we have a cohesive plan that we roll out to our entire desktop computers. We're starting right now to have laptop computers on a laptop cart that are mobile. And so they travel from classroom to classroom, and we build in certain locations within the building that are charging stations—that are appropriately ventilated and have the capacity to charge all those laptops. And really we're doing that, again, in the spirit of flexibility. That means that we can have slightly fewer laptops and make them reach further and make them available to the classes that are using them at that moment in time. We're just talking now about, you know, are we going to one-to-one digital computing and one-to-one device partitions within the classroom that there is a digital component as part of that.

**MILTON SHINBERG:**

There's an architectural consequence to the changeover in technology also. It's important to have space that can support the changes of program and including blended learning that a school might initiate at some point. The last thing we want to do is build unused square footage. But for



flexibility's purpose, we have to provide some extra space for them.

**JUAN MORENO:**

That's the toughest part for architects is to anticipate the future in technology because it's changing so dramatically, and it is a tough one with clients as well. Because, you know, how much do you want to spend?

**AISHA ISACKSON:**

[Inaudible] the building is totally wireless. The school decided to spend the money so that we can allow flexibility for the students, especially at the high school level. They can actually be wireless about 50 feet away from the building, so the students can actually do outdoor work as well. The high school students actually have a laptop that they check out, and they have to bring it back to the teachers. I know the elementary school side was slowly putting [in] more smartboards. But I think the school feels like that's not just a main feature, especially in the elementary level.

**JOSHUA KERN:**

We have a number of people on this panel who are experts in LEED certification. I thought maybe Jenny I would start with you, but we've gotten a question about kind of the process [inaudible] certified or just an overview of the process. And then other folks—I know this is a...we could spend another 90 minutes just talking about the LEED certification process. But maybe just in a couple minutes, and then other folks can jump in as well.

**JENNY WIEDOWER:**

Sure. You guys probably have more direct experience certainly than I do. But just as an overview, it is a voluntary certification program that has a couple of different iterations. It can be for existing buildings; it can be for new construction; it could be for commercial interiors.

There are a couple of different options that are applicable for...in the charter school setting. But it's a point-based rating system that allows the owner, the needs, the...use of

the building and select points to go after in water efficiency, sustainable sites, materials and resources, indoor environmental quality, and energy efficiency. And in addition to a couple of innovation credits, such as with <http://www.usgbc.org>, you can find endless amounts of information about the LEED Green Building Rating System. You guys have some...

**JOSHUA KERN:**

And...just wanted to [inaudible] jump in—just to kind of direct your answers. We're getting a lot of chatter about charter schools who are perhaps a little frustrated with the LEED certification processes. They find it to be arduous and expensive. So if you could kind of direct your answer toward things that schools can do that...they want to be LEED certified [and] environmentally friendly. But they also don't want it to be cost prohibitive and/or administratively taxing.

**JUAN MORENO:**

It is a process that can be difficult at times. It's absolutely the case, I think, for any charter school when you're looking at pursuing certification on whatever level, there's many things that you have to consider.

One is a LEED or being green that charter schools should consider is that within their municipality, there's the chance that if you pursue a green permit, that you don't have to pay permit fees. So there's cost advantages upfront from that scenario, and that's one that has to be explored.

The other one that I would encourage any school beyond the point system that can be confusing—and you're absolutely right, Josh; it can take more than an hour and a half to describe. But the key is, and this is what I always share with my clients, is that you have to look at life-cycle decisions. So if you really want to consider saving money, have your design professional and their engineers teach you which decisions may cost you money day one, feel so prohibitive day one.

**MILTON SHINBERG:**

To piggyback on that a little bit, I'll give you an example: Washington, D.C. We are now required to hit LEED goals on school projects, which is a very high standard. The problem is that the funding does not support it, so it's a unfunded mandate. That doesn't mean in any way that schools and the architectural design schools don't want to achieve these things; we certainly do.

And a lot of things that are involved with making the sustainability—sustainable building—don't require additional expenditures on day one—the first cost—as opposed to the operating costs, but some of them do. So mechanical systems that are highly efficient will cost more. There are different opinions about how much more they cost, but we're seeing differences in the 10 percent, 8 [percent] to 10 percent level per jump from LEED certified to silver to gold to platinum and higher for platinum. We're seeing that in the D.C. market. Nonetheless with the same resource issues, so we don't know how to design a mechanical system. That's an example of some of the complications that are real in achieving good, sustainable results.

**LISA DESFOSSSES:**

One piece from the very practical side of applying this. We have one building in our network that was built for us, and that one is a LEED building. On all the other buildings that we have, we often spent more upfront knowing that it would cut our operating costs down the road. But we have not sought LEED certification for any other building, even though we've achieved state high performance benchmarks for those buildings. Just because of kind of the cost and the process that, for us being able to say it as a LEED building is not worth to us the cost and the time—when we could be spending that time on instruction. But it doesn't mean that we still don't take the exact same actions that we might otherwise in order to make sure that we're doing the right thing by our environment and making sure that our ongoing costs and footprint is reduced.

**JENNY WIEDOWER:**

So Lisa, that's a great point, I'm sorry, that you make, Lisa. And when you're a charter school, would there be changes or maybe the scalable changes across a number of schools? So that's a really important commitment to make, and not every school building has the ability to reach LEED certification or pursue LEED certification. But using LEED as a framework within which to implement changes however, in whatever timeframe and across however large a system is where we see really great success.

**AISHA ISACKSON:**

And I just want to include—everything else that you guys have said. I mean, budget is always very challenging for charter schools because we all have to fund our own construction. Just like City Neighbors, we did not get LEED certification; we just could not afford to. But there's always this conscious effort of reusing everything that we had to go with the construction. Even though I'm not LEED certified, there's always this conscious effort that we try to be as green as possible.

**JOSHUA KERN:**

So we have about 12 minutes left in this webinar, and there's at least two more questions that I want to try to get to. One involves interim spaces for schools that are new at and are considering modulars. But just more generally are concerned about not spending too much in their interim space. And the second question that I definitely want to get to is around security, which, of course, I think raises the question of security especially in perhaps more urban environments where that is a bigger issue.

So let's start with interim spaces first, especially for start-up schools. If the panel could talk a little bit about how schools should think about striking the balance between being in an adequate space but not spending too much on a space that they're only going to have for a couple years and being able to save space—save money—for their long-term home. And I'll just open that up to anyone who wants to kind of jump in.

**AISHA ISACKSON:**

That's a tough question.

**MILTON SHINBERG:**

One issue is whether the city or the municipality helps to support charter schools in a way that avoids the problem. And one solution [inaudible] establishing a new school can use that space and stay for a year or two years while they assemble the resources to do something else.

The issue is amortization. If you're in a space for two years, how much can you spend? If you go into a church basement that's not code compliant, you're giving money to the church essentially to make it code compliant, ADA [Americans with Disability Act] compliant, whatever is involved in that, as well as environmental issues. So it's a great idea to co-locate in a building where the building is already ready for you when you stay for a limited amount of time or go to an incubator space. And if at all possible, avoid the portable solution.

**LISA DESFOSES:**

I know that at Achievement First, one of the things that we have really been looking to do lately is to incubate in our own space. But we're starting with just kindergarten and first grade, and then we grow one grade per year.

And one of the things that we're thinking about is, "Can we incubate our second school in Rhode Island in that building as well?" Because we have extra space, and that way any money that we spend on that incubation stage is really an investment in what is ultimately our future space. So we don't feel like we're wasting money; we feel like we're just phasing it in the investment and over time. It's a luxury to have more space than you need at this moment. But also the idea of incubating a second school there potentially reduces the per student cost of having a building that's too big at the beginning but locking it up so that you have the ultimate case [inaudible] in the end.

**JUAN MORENO:**

I think one of the things that I'm seeing is that this notion of co-location...but decreased, that they're able to utilize a few classrooms, and they don't have to spend the capital to turn those around per code as you were suggesting, Milton, because that is cost prohibitive at times just to be able to utilize space.

And I've seen cases, for example, where co-location is occurring between university and charter school levels, which is fascinating because it's about education. But the key if it's a noneducation-used space, there are challenges related to the code because designing for a school is so different than other spaces, and the cost can be more.

**AISHA ISACKSON:**

I have to agree with you about the amortization. The good thing is we actually have a 15-year lease with the church for a dollar a year, which was great because it actually helped with the cost.

And I think now we are to the point that the schools are getting too small. We need more programming spaces. And it's great that we have such a low-cost lease that we managed to negotiate with the landlord that now we are slowly looking at our master plan again in [inaudible]: "Should we keep investing in the existing building or should we move to another location?" So those are all the factors that we all have to look into and figure out what's right for you.

**JOSHUA KERN:**

Before we jump into security, I just want to spend just one more minute on kind of interim or alternative uses. We've got some questions about [that], especially in more rural areas. Sometimes there's a need to have more [inaudible] about that kind of, especially in nonurban areas.

**AISHA ISACKSON:**

I think, I mean at City Neighbors High School, I don't think we have any shots of the classroom. But all the classrooms



has portable tables and stackable chairs so that they can easily be stacked up for small-group seating, take them out. You know, you can rearrange it to small groups. So I think flexible furniture is definitely something that needs to be considered so that you can allow flexible spaces.

**JUAN MORENO:**

I think the key is selecting those spaces within a classroom that allow for [inaudible] space is mostly unused. And the more uses you can make out of that, the less dollars you're spending on it.

And so in this particular charter school case, they're using the charter school during the day to ask the mothers of the children to come in, and they teach them courses. In this one particular case, it was cosmetology that was going on. And so it's, again, a great way where you see charter schools seeing a community need and addressing that need.

**JOSHUA KERN:**

So with the five minutes we have remaining, maybe we can move to security. And we're seeing questions and comments on the chat room where folks are concerned about security in all environments. There's been, you know—again kind of opening up to the entire panel. If people could talk a little bit about [the] kind of...what they do to make their school as secure as possible.

**MILTON SHINBERG:**

I could just make one comment about what D.C. is doing right now; the Department of General Services, which runs all the school construction. After the last incident—the horror of that—[they] said we're not waiting for the next round of school design projects to come in. We're taking every project whether it's under construction right now or in design, and we're going to develop some hardened spaces within those. We're going to identify paths of exit and emergency plans. And this will change the buildings, whether they're in design or under construction.

So this is something that architects will be working on, but we're not experts in this. We need to work with the schools obviously. But we also have to work with local police departments and rescue and try to find out how they actually operate and modify the school plans accordingly. This is, unfortunately, it's due to...

**JUAN MORENO:**

...[The] design of schools over time: One of the challenges that I see is so many were designed as fortresses. We all know which kind of schools we've talked about. They've turned their backs on the community. They were buttresses where students were not walking into a lively space. The challenge with that kind of space, besides the obvious uninspiring space that they created, are that there was a lack of visibility. And what we try to do in our school designs is from any point to be able to see what's going on outside of the school.

There's always a security present, so there is this very fine line, and it's difficult. I don't have an absolute answer, but one that says I think visibility is key so you know and can anticipate something happening.

**AISHA ISACKSON:**

I think in the case of the...when we first took over the building, the first thing we did was took down all the metal grates. And some neighbor actually came running to us and said, "What are you doing? You're going to get vandalized." It takes a lot of community meetings to convince the community that it is the right thing to do for the community. And we actually now have an active community member that every time she sees something will [inaudible].

And, again, I think when you build a beautiful building that the students and the community have an ownership. They're not going to destroy what they love to see happening in their school. So a lot of it has to build, you know, building relationships within your community, with

your parents as well, because you're not in school the whole time. What happens after school hours?

**JOSHUA KERN:**

Great.

**LISA DESFOSSSES:**

I'll just say...

**JOSHUA KERN:**

You've got about, yeah, a minute left.

**LISA DESFOSSSES:**

I mean Newtown is in our back yard, and so this topic certainly hits home. And we all stopped and really reevaluated after that happened.

And I think some of the major things that—well suggestions that are basically no cost, you know, to move a light from here to here; make sure you have a light here. That has been really worthwhile. We do have extra cameras. We have some limited interior cameras. But far and away I think one of the biggest things that we've done is when we design buildings, when we have the ability to do it, is we really separate some of the classroom space from some of the more public areas. So the gym, the cafeteria, and community events or parents or that sort of thing—that no one can get into the classroom wings. We really prevent a lot of [inaudible] just other activity that way.

**JOSHUA KERN:**

That's great. Again, I want to thank everyone on this panel—Lisa, Milton, Juan, Aisha, [and] Jenny. You've been fabulous; I think it's been incredibly informative.

This presentation will be on the Charter School Resource Center website. I encourage you to look at it again and remind everyone that what makes great spaces is not necessarily how much money you have or how expensive the space is, but its connectivity to your mission and your

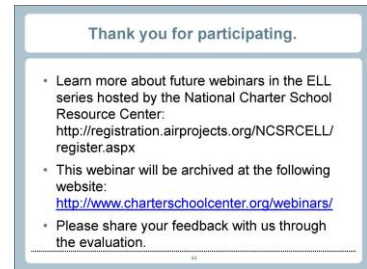


**Slide 43**

vision. So, again, thank you so much. And, again, good afternoon.

**TAMMIE KNIGHTS:**

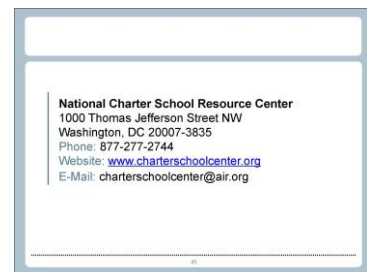
And I want to encourage you. We have a survey that will pop up on your screen, so if you could take just a minute more to complete that survey. Thank you again everyone for joining us, and we hope that you'll be joining us again soon.



Thank you for participating.

- Learn more about future webinars in the ELL series hosted by the National Charter School Resource Center:  
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